

# Reforming Social Security

## Why the Reform is on the Agenda?

- In most Western countries, participation in the pay-as-you-go (PAYG) social security system does not seem attractive for the current younger generations.
- The expected rate of return on social security contributions is considerably lower than the expected rate of return on financial investments.

# Why the Reform is on the Agenda?

- Lower and even negative population growth only aggravates the burden that a PAYG system imposes on younger generations.
- A considerable interest in a reform in which the PAYG system would be (at least partially) replaced by a funded component taking advantage of a higher market rate of return.

## The Young vs. the Old?

- In the absence of altruism such a reform creates an intergenerational conflict
- Future generations benefit from a transition to a fully-funded system
- Existing pensioners would have to accept reductions in their benefits unless compensated.

# Debt-financed Reform?

- Public debt to pay for the benefits of the transition generation?
- Whether this works depends on whether PAYG system redistributes intragenerationally
- If benefits are earnings-related, then using public debt does not change anything (without borrowing constraints, at least)

## No pain, no gain?

- With earnings-related benefits and using public debt to compensate the transition generation, the gains of future generations are neutralized by higher future taxation needed to service public debt (Fenge, 1995 and Brunner, 1996 ).

# No pain, no gain?

- Intragenerational redistribution is part of the social security system in many countries (flat-rate benefits), but the implied inefficiencies cannot be attributed to the existence of a PAYG system which inherently only induces intergenerational redistribution.

## Where gains come from?

- Pareto improvements identified in the literature rely on the presence of either intragenerational redistribution or externalities
- Neither is inherently related to a PAYG system
- These can be addressed without changing pensions (see Sinn, 2000)

## Eliminating intragenerational redistribution

- Most social security systems redistribute intragenerationally
- If PAYG system is replaced by mandatory private saving, this also means eliminating redistribution that was carried out in the PAYG system
- If redistribution is distorting, as it usually is, its elimination creates efficiency gains

## Eliminating intragenerational redistribution

- However, the presence of efficiency gains does not prove that social security system should be abolished, or that its elimination would generate welfare gains
- The reason why there was redistribution in the first place reflects certain value judgments on part of society / political process
- Eliminating the system overrides these

## Eliminating intragenerational redistribution

- To summarize: replacing a redistributive PAYG system by a non-redistributive funded one is a political / ideological / value choice, and the tradeoffs should be made visible
- It involves two reforms: 1) eliminating intergenerational redistribution and 2) eliminating intragenerational redistribution

## Eliminating intragenerational redistribution

- The two reforms can be decoupled: it is possible to introduce funding by the government, instead of individuals, and keep redistributive nature of the system. That is, reduce only intergenerational but not intragenerational redistribution
- Also, it is always possible to change the type of PAYG system to earnings-related

# Externalities

- Sometimes, a PAYG reform is argued for by the argument that it encourages capital accumulation, and that capital accumulation has positive externalities on growth
- Again, this could be addressed by suitable subsidies for private saving, without reforming social security

## Summary of the arguments

- The arguments above do not mean that social security system should be reformed, or should not be reformed. Rather, they aim to make the tradeoff visible

# Gain without Pain?

- Köthenbürger and Poutvaara (2006): if the elderly own land, they participate in the future efficiency gains:
  - Voluntary market transactions in land
  - The part of the future efficiency gains which improves land productivity is immediately capitalized in its current market value.
  - If sufficiently high, the increase in land value compensates the old land owners for the cut in social security benefits.

## Assumptions

- To capture the absence of lump-sum taxes it is assumed that the government cannot resort to a land tax.
- Human capital endogenous
- Earnings-related system

# Critical remarks

- The simulations are suggestive and are not meant to be calibrated to a specific economy.
- Thus, the results are of a theoretical nature.
- In other words: showing that there can be a Pareto-improvement does not prove that there is

# Policy implications

- The compensation mechanism may, nonetheless, constitute a part of a partial social security reform.
- A policy-oriented analysis should calibrate the factor shares of fixed and adjustable physical capital, as well as the production function for human capital.
- A computable general equilibrium model allowing for a policy transition needed.

# Why social security in the first place?

- If the elimination of a PAYG system could be a Pareto improvement, why would such a system exist?
- It is not plausible that a PAYG system would have been implemented in the first place if it did not benefit the older generation at that time.
- The creation of a PAYG system could be explained, outside the model, by arguments such as the inability of the poor to save for their retirement in the 19th century.

## Wealth inequality

- Could PAYG system have benefited the elderly in the first place, but lost its appeal subsequently?
- Yes. One candidate is unequal distribution of land ownership.
- The poor, older citizens without assets would favor a PAYG system, as they are not hurt by the efficiency loss capitalized in land value.
- An increasing middle-class with widespread stock ownership might contribute to the eroded popularity of the PAYG system among the elderly.

# Increases in other taxes

- Another candidate is the secular increase in other public expenditures.
- An increased tax burden implies higher distortions, and increases the cost of maintaining a PAYG system.
- As the increase in the welfare state during the 20th century was not anticipated when the social security system was introduced, the elderly could have supported its introduction then, but now benefit from its abolition even if nothing other than the general wage tax rate has changed.

## Behavioral motivations to keep public pensions

- A lot of recent literature has focused on imperfect rationality, myopia etc.
- Hyperbolic discounting: people are seen to be impatient and to save too little for future
- Framing: it is shown that decisions can be influenced a lot by how things are presented
- These could motivate PAYG system as an intervention to correct mistakes by people

# An example

- Peter Diamond and Botond Köszegi (2003): Quasi-Hyperbolic Discounting and Retirement (Journal of Public Economics)
- People have self-control problems, but they know it and can act accordingly
- A motivation for policy intervention

## Critical comments

- Very much in line with the recent trend in behavioral public finance, which has identified plenty of scope for government intervention when individuals are not rational
- An analogue to market failures with externalities: how about government failure?

# A Case for Paternalism?

- But should bounded rationality and non-standard preferences really make us all paternalists?
- Not really!
- See Glaeser's NBER WP 11789 "Paternalism and Psychology": "recognizing the limits of human cognition may strengthen the case for limited government"

## Conclusion: Reasons to keep (some of) the PAYG system

- The links between social security and public education and other expenditures benefiting future generations
- Intragenerational risk-sharing
- PAYG system could be seen as an asset substituting for the inability to sell or buy stakes in future wage sum / GDP
- These do not imply that the current level of social security is needed to do this

## Conclusion: Reasons to keep some level of public pensions

- Imperfect rationality, impatience and other behavioral motivations could also justify some intervention
- Also, without imperfect rationality there is always the case of the prodigal elderly: saving too little waiting to be bailed out
- Either of these can also be addressed using compulsory saving, and thus they are not arguments in favor or against PAYG system

## Conclusion: Population aging and reform

- From the perspective of intergenerational equity, reducing PAYG system could be justified as a way to smoothen the burden of population aging, even if it hurts the elderly. But reduction need not equal elimination.
- Again, economic analysis helps to understand tradeoffs. Conclusions on what needs to be done depend on value judgments

# Conclusion: Future of pensions

- It has been established that the political process tends to favor the elderly
- Political support for any reform needs to be analyzed
- The role of mobility as a constraint for taxing the young?
- The interplay between pensions and other public policies, and individual decision-making?